

FIG. 1A

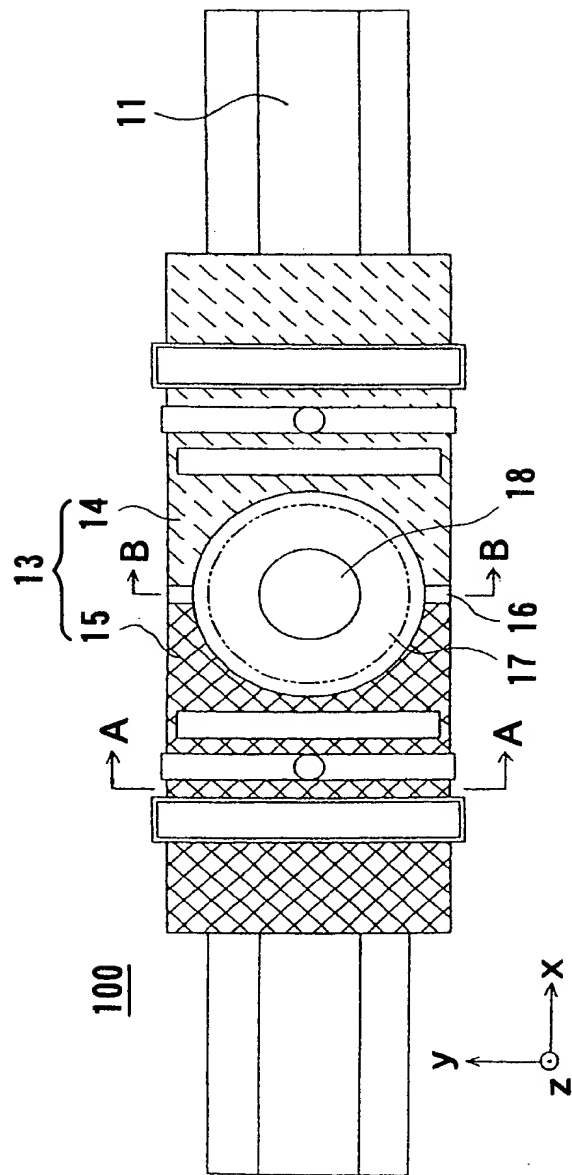
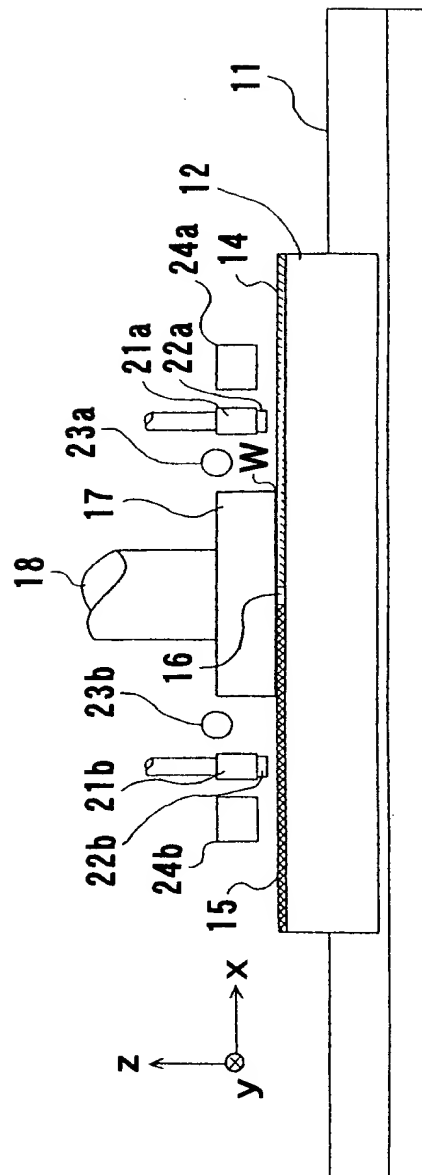


FIG. 1B



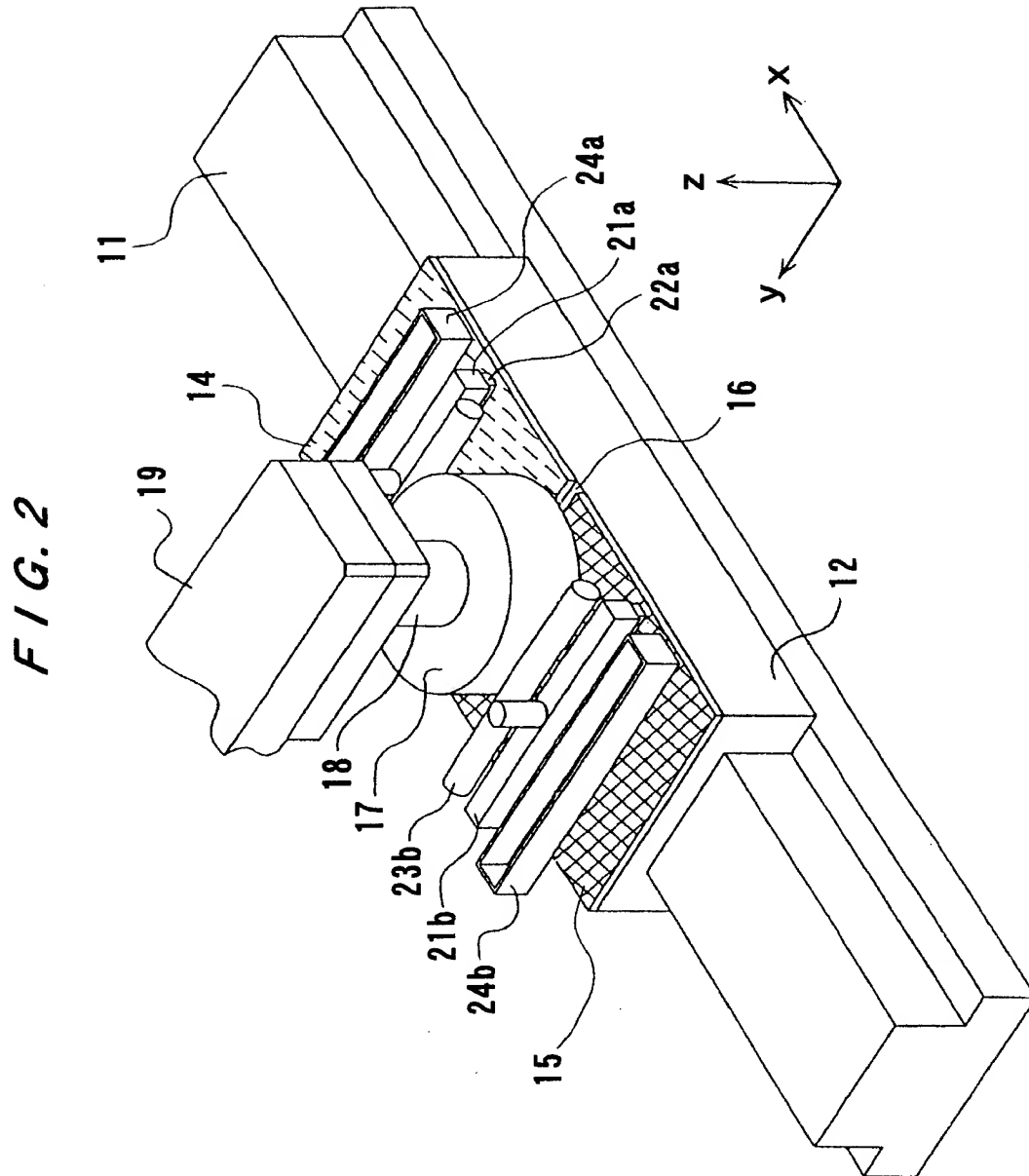
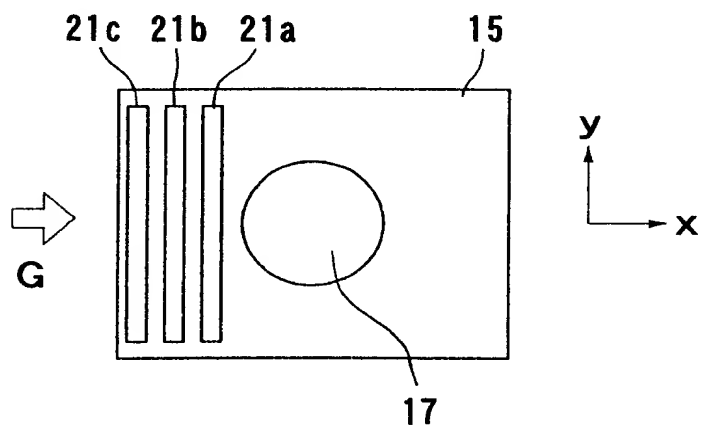


FIG. 3B



F I G. 3 C

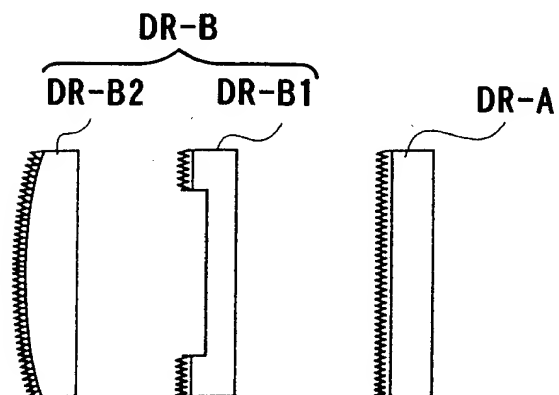


FIG. 4

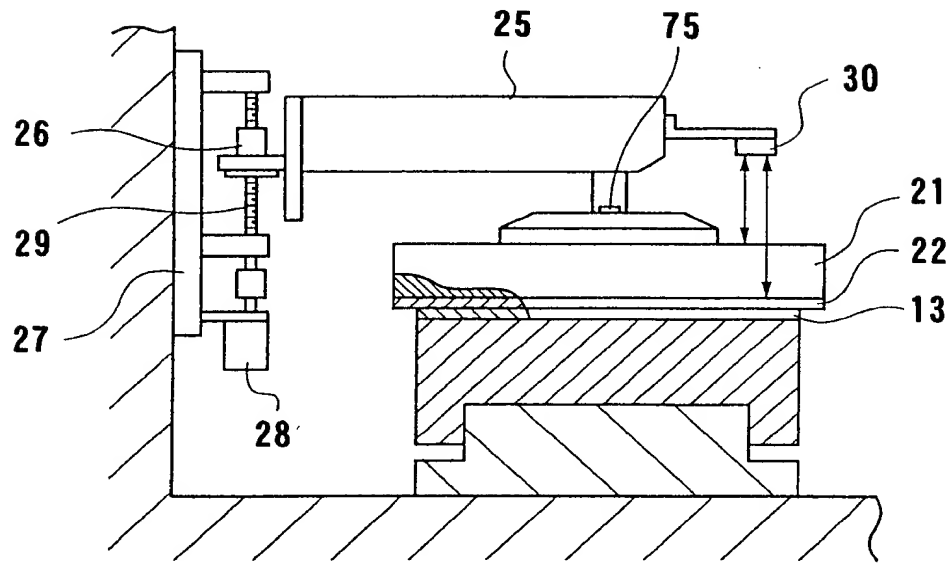


FIG. 5

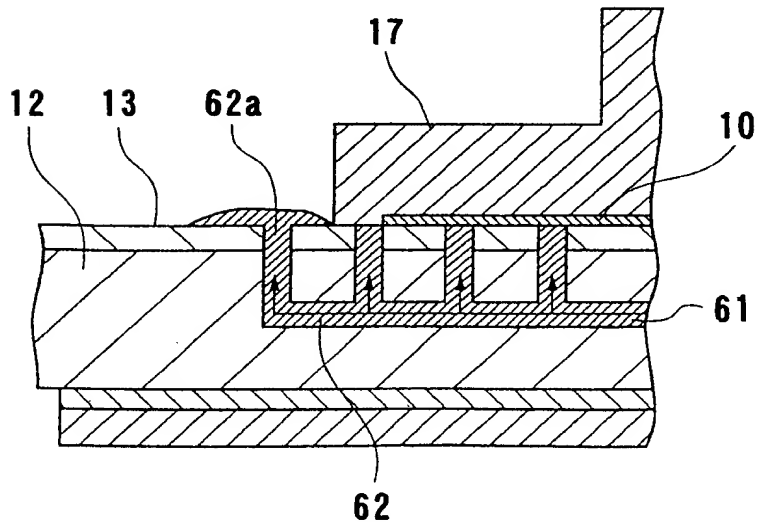


FIG. 6A

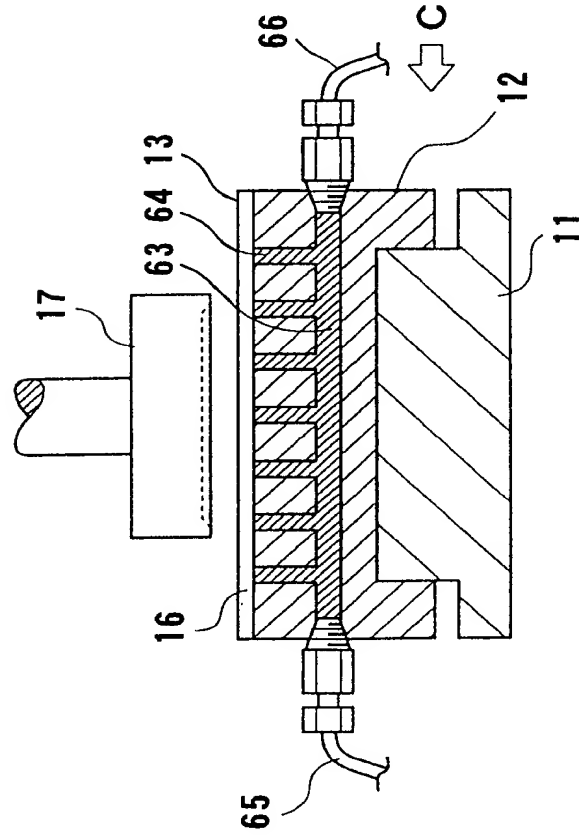


FIG. 6B

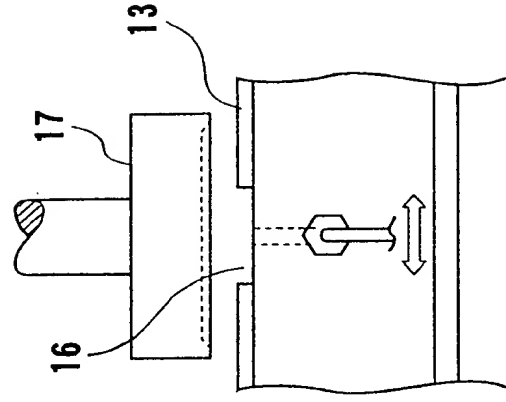


FIG. 7

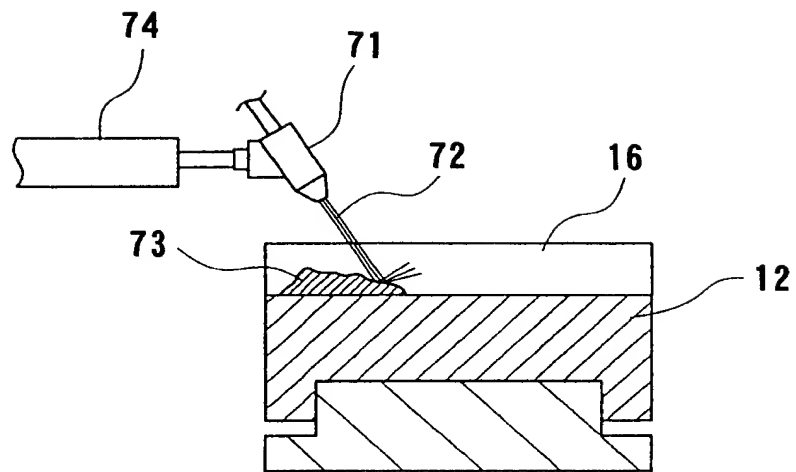


FIG. 8A

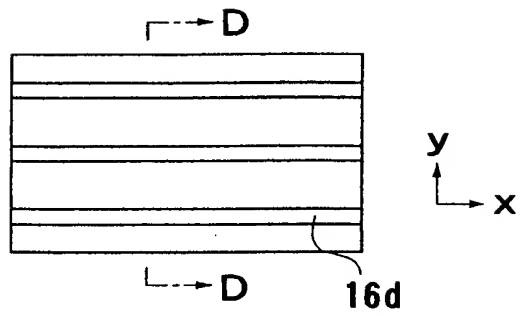


FIG. 8B

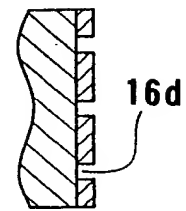


FIG. 9A

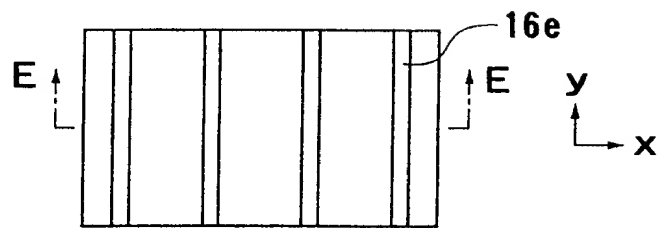


FIG. 9B

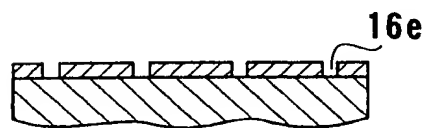
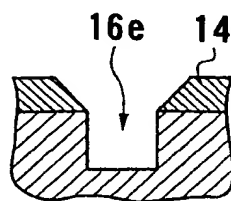


FIG. 9C



009334 0430
105720 185E0660

16e

16f

y

x

A cross-sectional view of a substrate 16e. The substrate is represented by a rectangle with vertical lines indicating internal structure or layers. A coordinate system is shown to the right of the substrate, with a vertical y-axis and a horizontal x-axis.

FIG. 11A

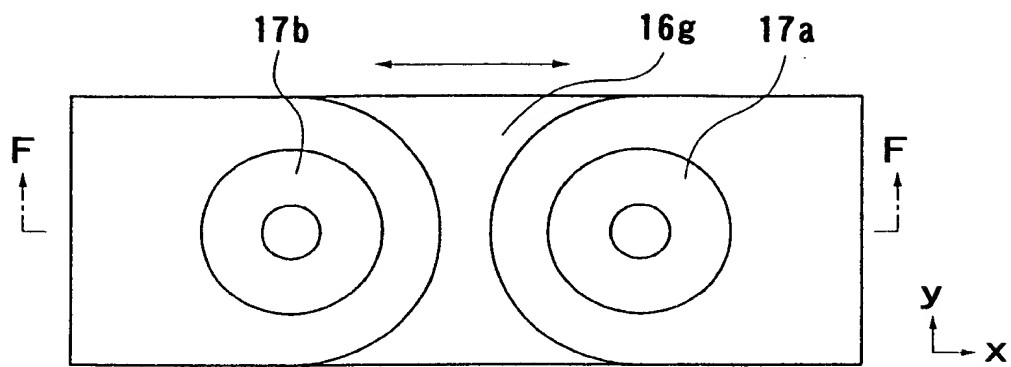


FIG. 11B

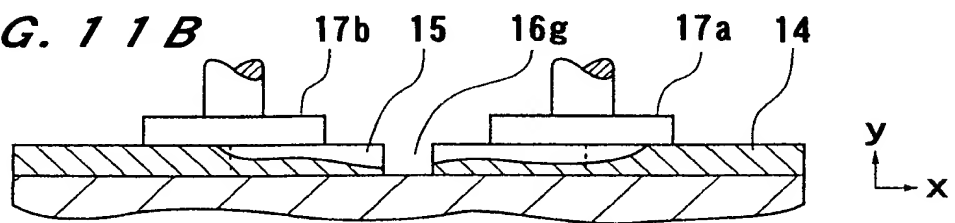


FIG. 11C

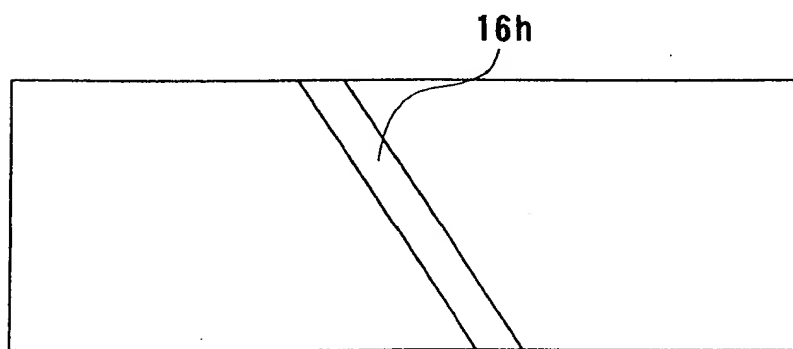
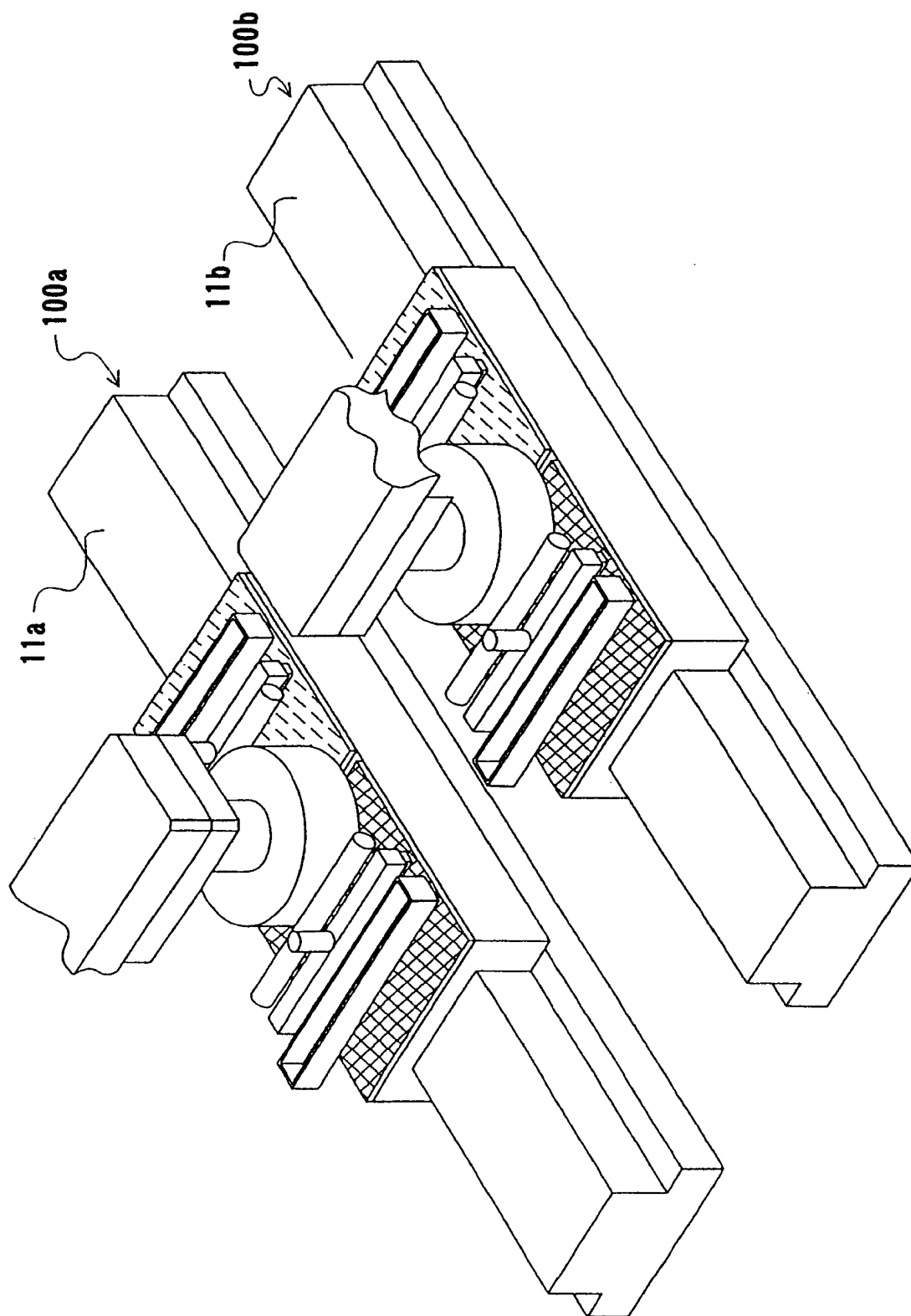
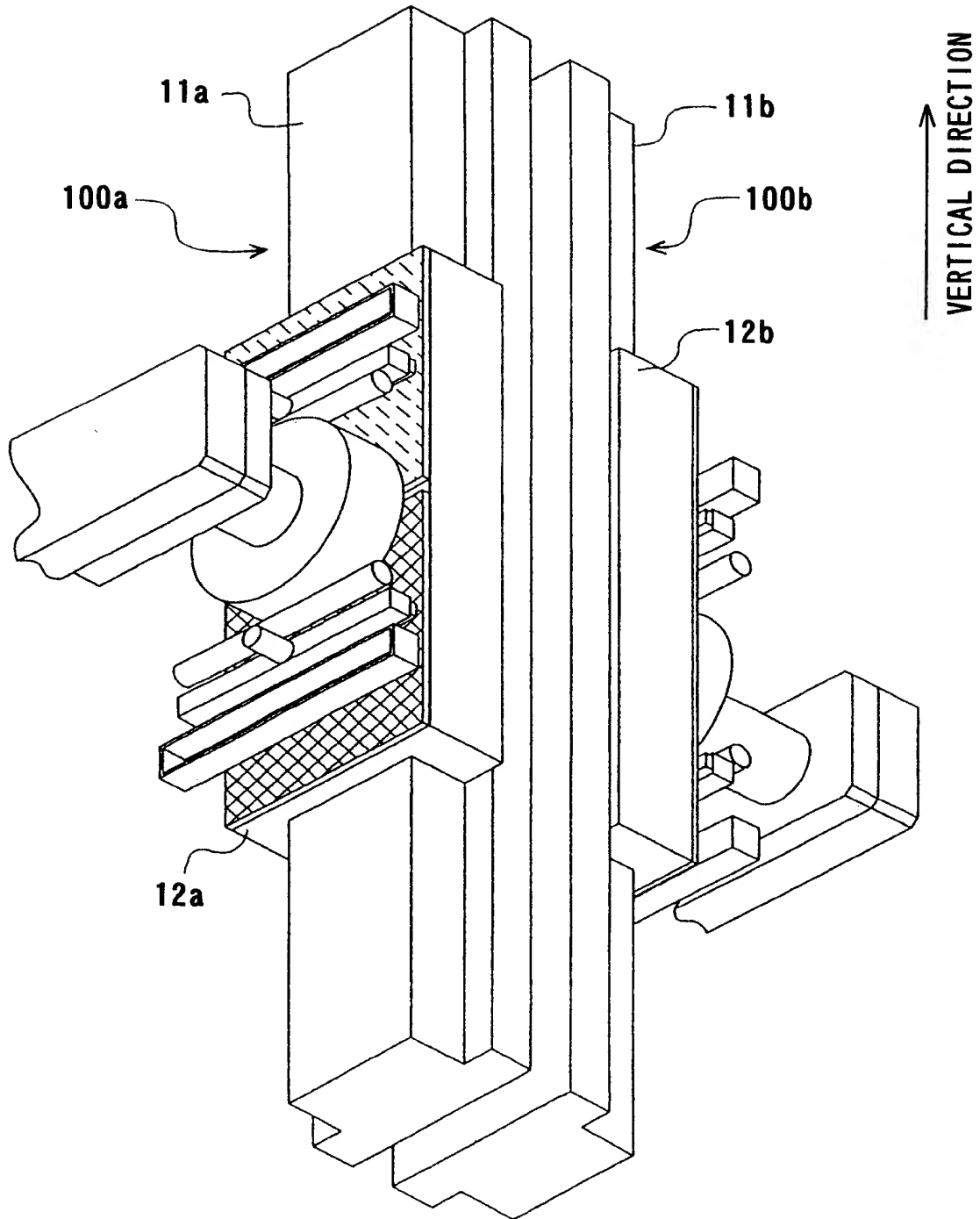


FIG. 12



11/21

FIG. 13



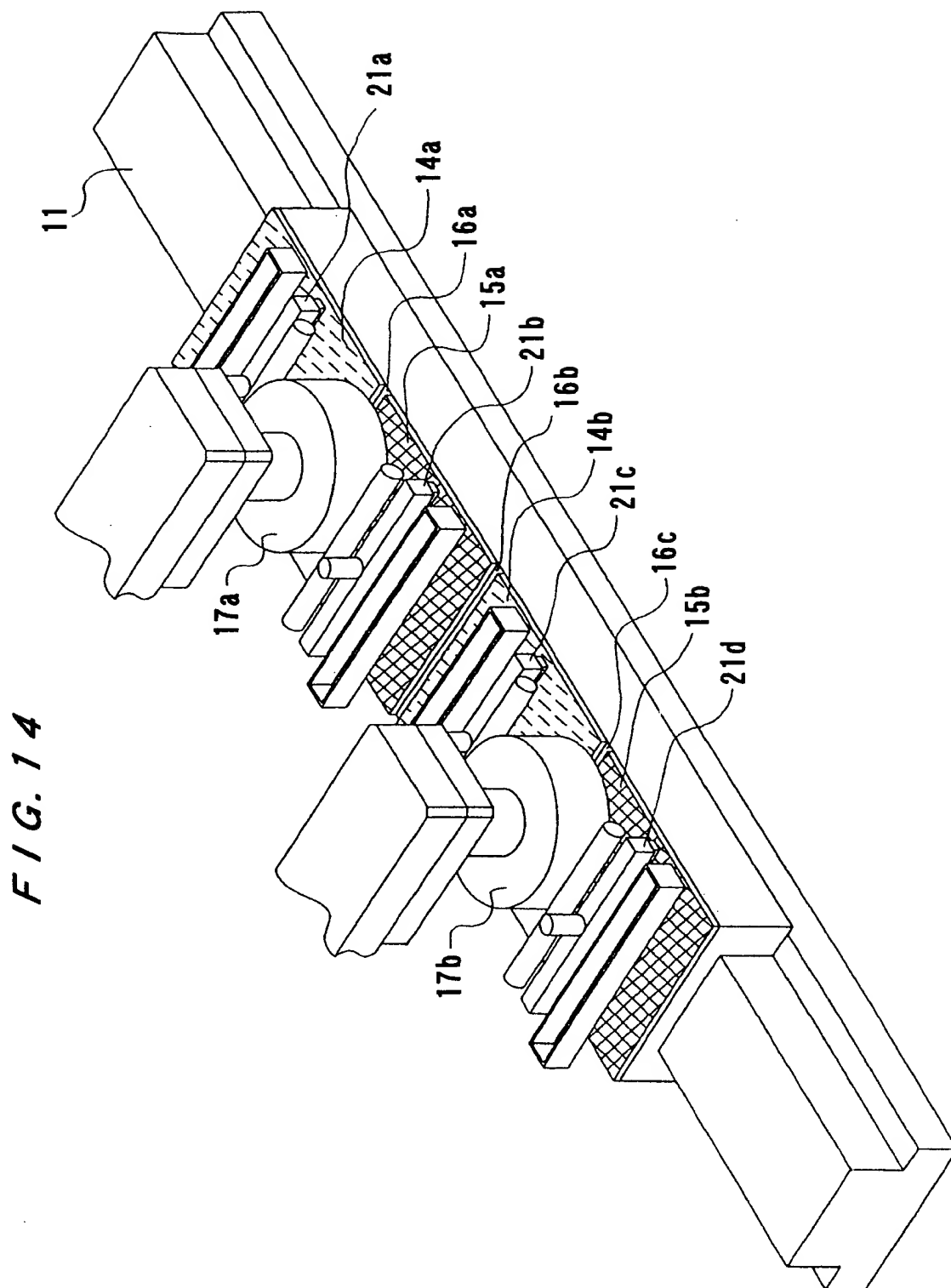
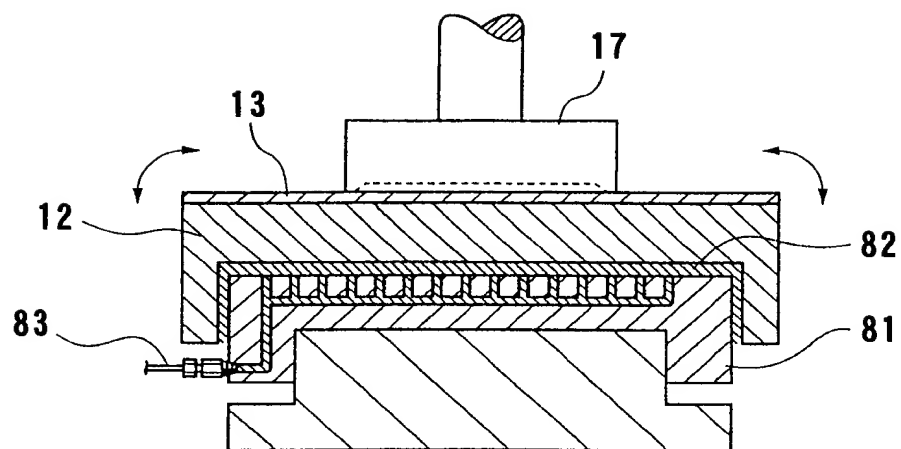
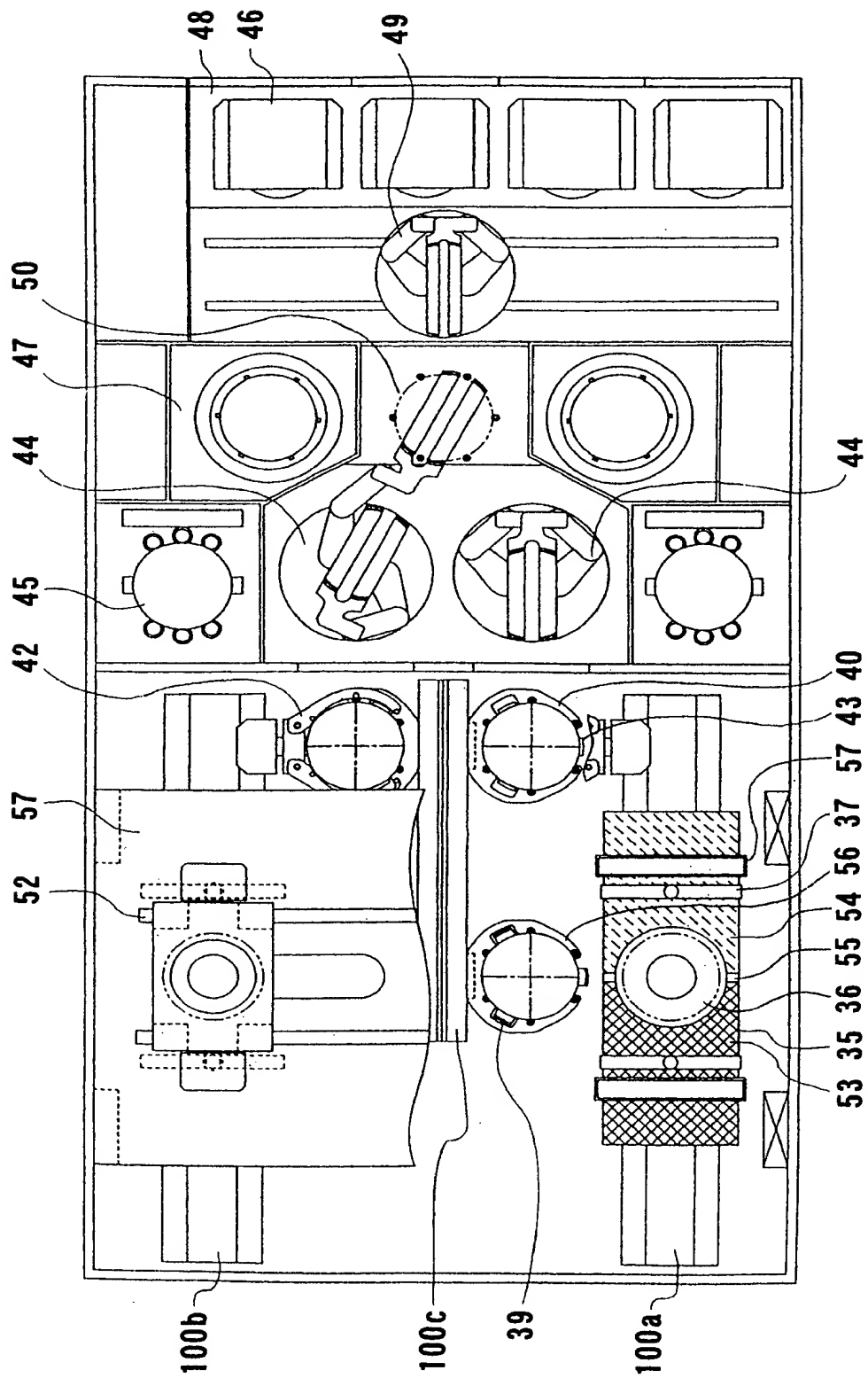
[illegible]

FIG. 15



0909594 074304
F02P201650660

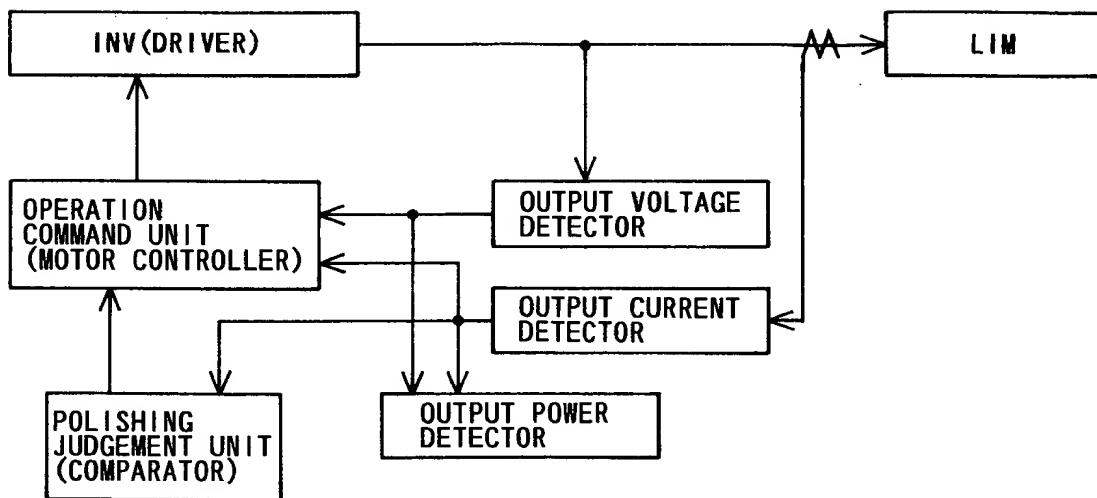
FIG. 16



	LIM	LDM	LPM
CONTINUOUS OPERATION	⊙	△	○
INTERMITTENT OPERATION	○	⊙	⊙
SMALL-DISPLACEMENT RECIPROCAL MOVEMENT	△	⊙	⊙
LARGE-DISPLACEMENT RECIPROCAL MOVEMENT	⊙	△	○
POSITIONING PERFORMANCE	○	⊙	⊙
LARGER PROPULSION	⊙	○	○
LOW-SPEED OPERATION	⊙	○	⊙
HIGH-SPEED OPERATION	⊙	○	△
OPEN-LOOP CONTROLLABILITY	○	×	⊙
VERTICAL DELIVERY	○	△	○
SIMPLER CARRIAGE STRUCTURE	⊙	△	○
SIMPLER CONTROL POWER SUPPLY	○	⊙	○
PRICE	○	△	△
ADAPTABILITY	LARGE-OUTPUT, CONTINUOUS TRANSPORT MEDIUM AND HIGH-SPEED TRANSPORT	SMALL-DISPLACEMENT, HIGH-SPEED POSITIONAL CONTROL	LOW-SPEED, HIGH-PROPULSION TRANSPORT INTERMITTENT TRANSPORT POSITIONAL CONTROL

LMP : PULSE MOTOR

FIG. 18



CONSTANT OUTPUT FREQUENCY CONDITION

	CONSTANT OUTPUT VOLTAGE		VARIABLE OUTPUT VOLTAGE (HIGH EFFICIENCY)	
	LIGHT LOAD	HEAVY LOAD	LIGHT LOAD	HEAVY LOAD
VOLTAGE			SMALL	LARGE
CURRENT	SMALL	LARGE	SMALL	LARGE
POWER	SMALL	LARGE	SMALL	LARGE
POWER FACTOR	Δ	\bigcirc	\bigcirc	\bigcirc

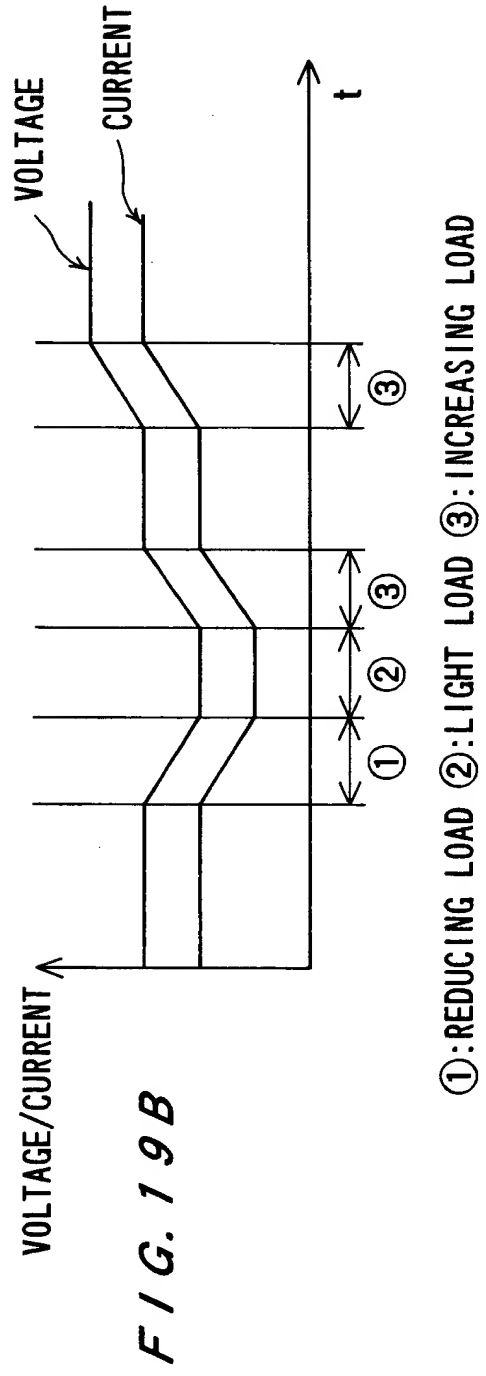
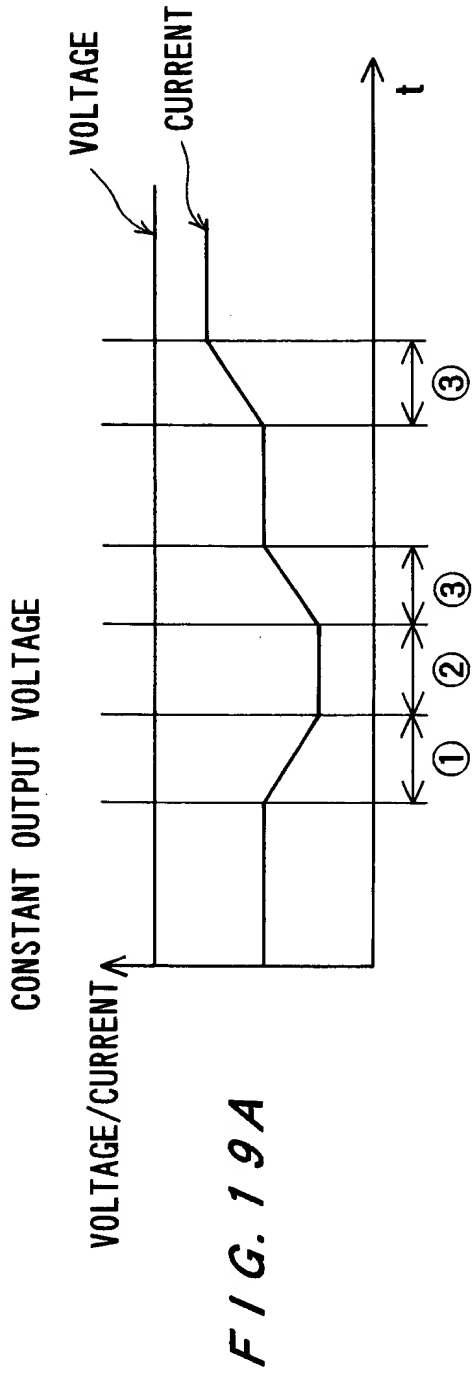
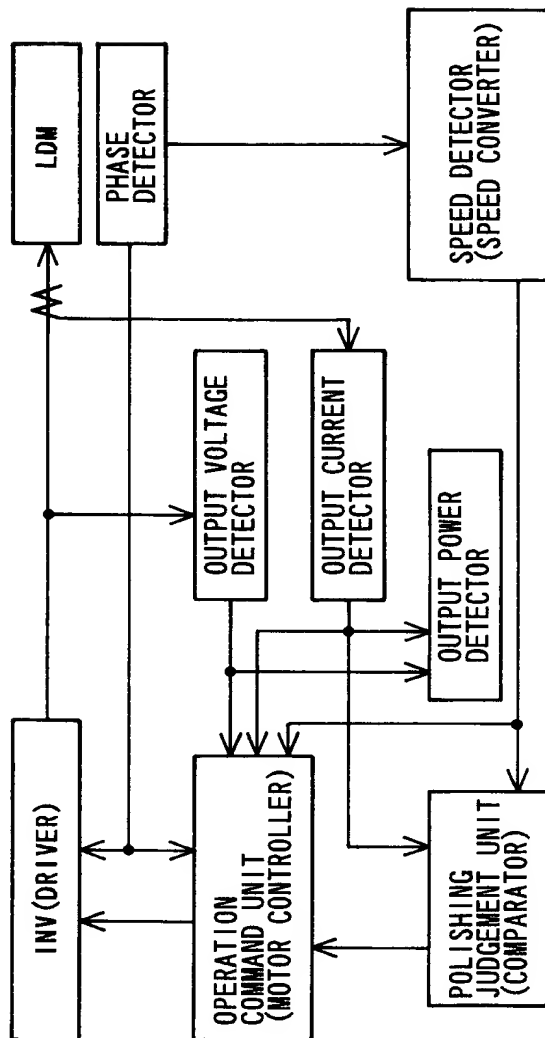


FIG. 20



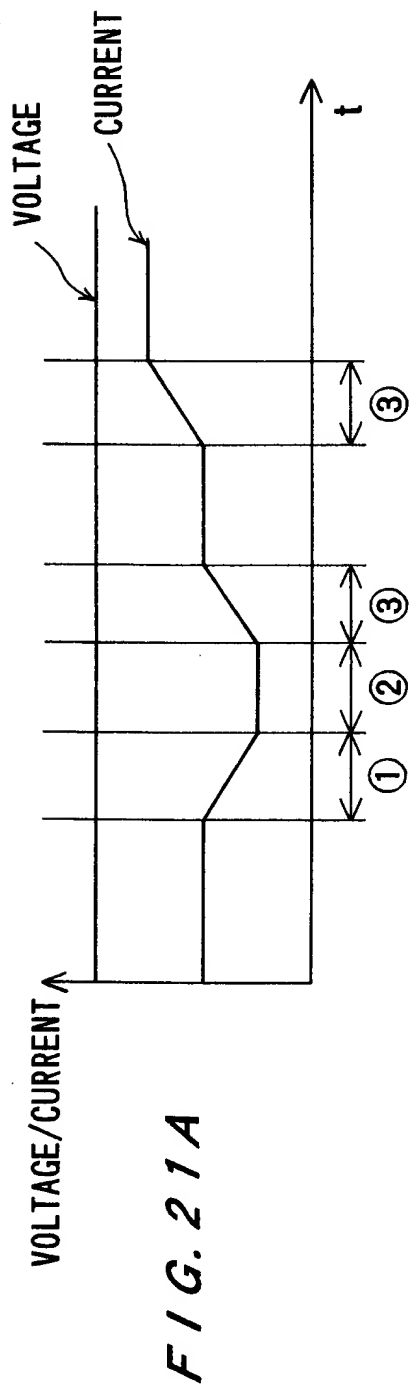
CONSTANT SPEED CONDITION
CONSTANT OUTPUT VOLTAGE

	LIGHT LOAD	HEAVY LOAD
VOLTAGE		
CURRENT	SMALL	LARGE
POWER	SMALL	LARGE
POWER FACTOR	△	○

VARIABLE SPEED CONDITION
CONSTANT OUTPUT CURRENT

	LIGHT LOAD	HEAVY LOAD
SPEED	HIGH	LOW

CONSTANT OUTPUT VOLTAGE (SPEED)



CONSTANT OUTPUT CURRENT

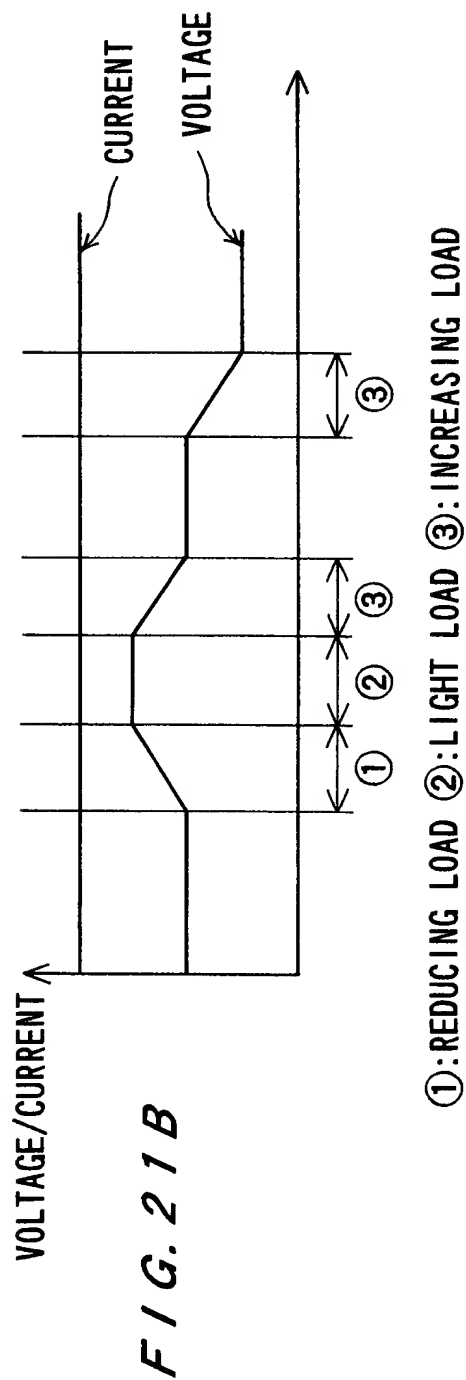


FIG. 22

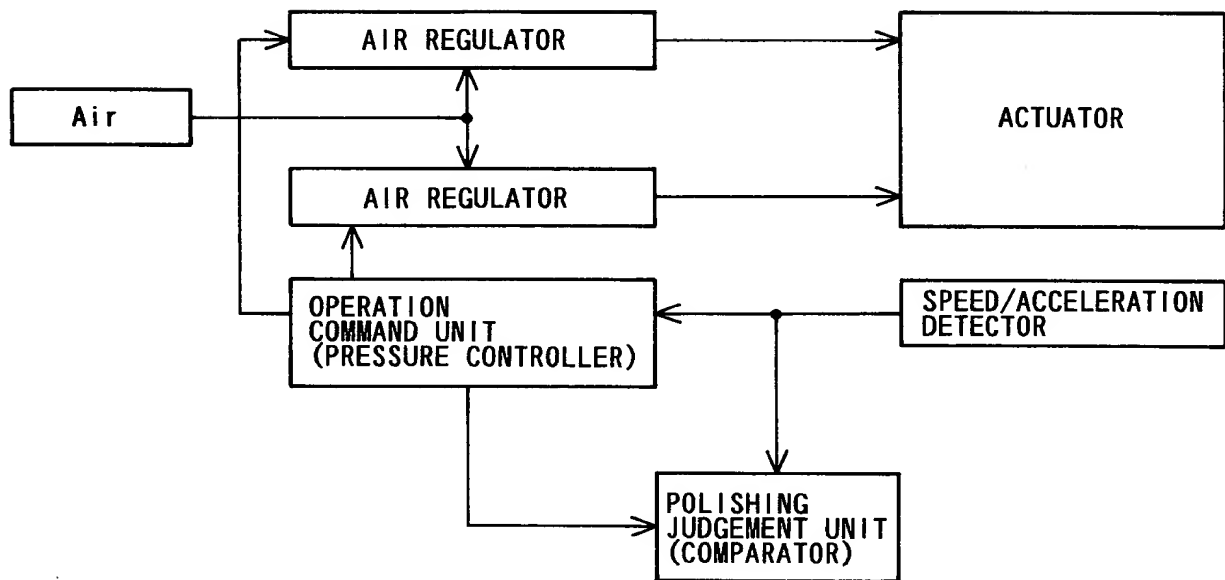


FIG. 23

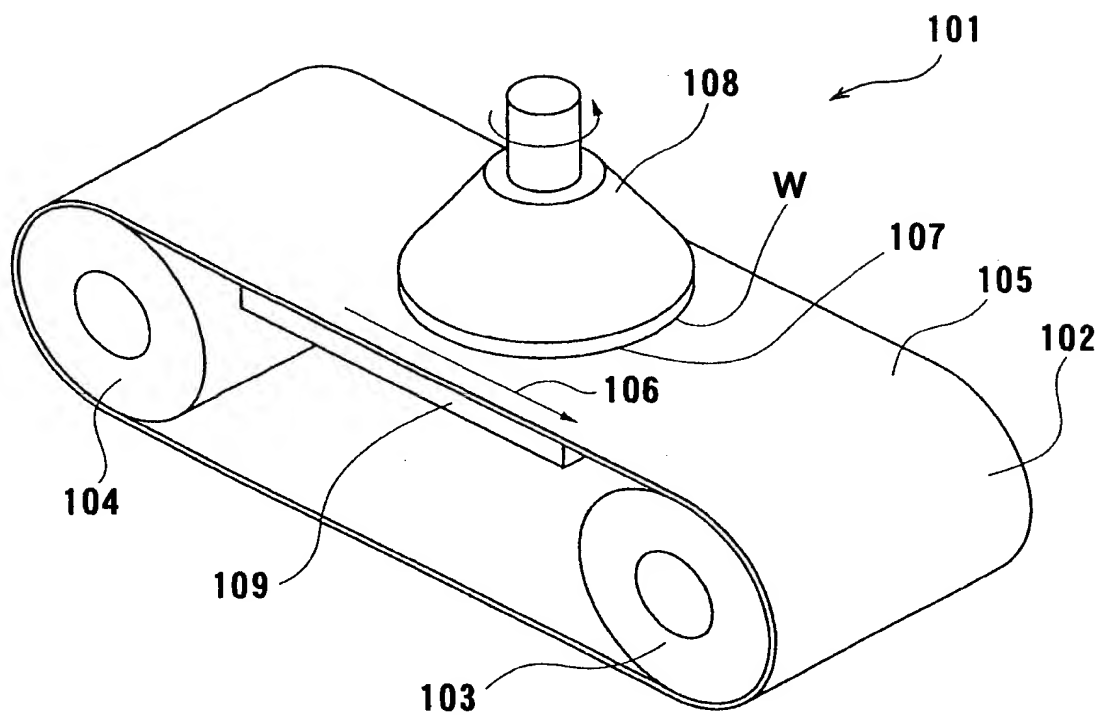


FIG. 23: 101, 102, 103, 104, 105, 106, 107, 108, 109